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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/661,177

09/12/2003

Steven Carl Crusius

79287

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22242

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11/06/2006

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EXAMINER

AMRANY, ADI

ART UNIT

PAPER NUMBER

2836

DATE MAILED: 11/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/661,177

Applicant(s)

CRUSIUS ET AL.

Examiner

Adi Amrany

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicants' arguments filed October 10, 2006, have been fully considered but they are not persuasive.

In response to applicants' comments on page 12, Peplinski (US 2003/0063715) discloses each of the limitations of new claim 10. Peplinski discloses a DC voltage supply which is connected to both a barrier movement controller (figures 1, 2, item 43) and to a battery charging current (figure 2, item 200). The Peplinski barrier movement operator contains one AC wall plug (item 170). The AC voltage is converted to DC (paragraph 21) and the DC voltage is provided to each of the electrical components of the barrier movement operator, including the controller and battery charging current.

With respect to the unidirectional isolation device, figure 6a of Peplinski shows that a diode (item D1) is provided between the battery (B1) and the DC voltage supply (output of rectifier 204). Applicants' argument regarding whether the unidirectional isolation device prevents or permits current flow in specific directions is not persuasive, as the controlled direction of current flow is not a claimed limitation.

Applicants' arguments regarding the effect of the Peplinski switches to disconnect the battery from the unidirectional isolation device, is not persuasive, because during normal operations, the switches (S1-2) are closed and the battery (B1) is connected to the DC voltage supply via the first conduction path. Claim 10 does not recite any limitations regarding the timing of connection compared to a detected power fault.

With respect to applicants' arguments regarding the combination of reference in the rejection of claim 9, Furst (US 5,844,328) discloses the recited limitations. That the Furst backup device can also detect a short-circuit is not relevant, as Furst discloses the circuitry for *selectively disconnecting* the battery from the conduction path, as recited in claim 9 (column 6, lines 53-64). Since the combination of references was not challenged, the rejection of claim 9 is maintained, as provided below.

Drawings

2. Replacement figure 1 was received on October 10, 2006. The drawings is accepted.

Claim Objections

3. Claim 6 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. The limitation of "limits the current to an amount *less than a maximum amount*" does not further limit claim 5. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2836

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 2-3, 5-8 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Peplinski (US 2003/0063715). Since claim 10 is the only independent claim, it will be discussed first.

With respect to claim 10, Peplinski discloses a battery backup apparatus (figure 2; paragraph 23) for use with a barrier movement operator (figure 2, item 106; paragraph 19), comprising:

- a DC voltage supply (figure 6, output of item 204; paragraph 21, lines 1-6; paragraph 41;

- a DC power connection from the DC voltage supply to a barrier movement control (figure 2, item 43; paragraph 20, lines 12-17);

- a battery having a first and second terminals (figure 6b, item B1; page 4, paragraph 36);

- a first conduction path and second conduction path (figure 6a, output of item 204 and electrical ground; paragraph 41) connected to the DC voltage supply;

- a battery charging circuit (figure 6a, item 210; page 4, paragraphs 39 and 42-44) for receiving a DC voltage from the DC voltage supply via the first conduction path and the second conduction path and for charging the battery when the input DC voltage exceeds a predetermined voltage (paragraph 37); and

a unidirectional isolation device (figure 6a, item D1; page 4, paragraph 42, lines 3-5) connecting DC voltage from the first battery terminal to the Dc voltage supply via the first conduction path (figure 6a).

Peplinski discloses the battery as item B1, but the battery is not properly labeled in figure 6b. Battery B1 is located in the top-center portion of the figure, between switches S1 and S2 and voltage divider 214. The Peplinski back-up battery apparatus comprises an AC/DC converter that is shared by the barrier operator and the back-up battery circuitry. The AC/DC converter DC output powers the barrier and recharges the battery.

It is inherent in the Peplinski apparatus that the rectifier 204 comprises two outputs; Vdc and Ground, which provide a first and second conduction paths, respectively. Further, the Peplinski battery backup apparatus recognizes a loss of external power when the input power drops below a *predetermined value*.

With respect to claim 2, Peplinski discloses the battery backup apparatus of claim 10, and further discloses an audible signaling device (figure 2, item 180; page 3, paragraph 24).

With respect to claim 3, Peplinski discloses the battery backup apparatus of claim 2, and further discloses an apparatus (page 3, paragraph 25-26) for enabling the audible signaling device in response to current flowing from the battery to the DC voltage supply via the unidirectional isolation device.

With respect to claim 5, Peplinski discloses the battery backup apparatus of claim 10, and further discloses the battery charging device comprises circuitry for

limiting a current applied to the first battery terminal (figure 6a, item R1; page 4, paragraph 44).

With respect to claim 6, Peplinski discloses the battery backup apparatus of claim 5, and further discloses the circuitry for limiting, limits the current to an amount less than a maximum amount (page 4, paragraph 44, lines 1-2). Peplinski discloses that the current limiting circuitry has a threshold of 380mA. It is interpreted that 380mA is an amount less than a maximum amount.

With respect to claim 7, Peplinski discloses the battery backup apparatus of claim 10, and further cut out circuitry (figure 6b, items K1, K2, S1 and S2; page 4, paragraphs 37 and 38) for disconnecting the first battery terminal from the unidirectional device.

With respect to claim 8, Peplinski discloses the battery backup apparatus of claim 10, and further discloses cutout circuitry (figure 6b, items K1-4, S1 and S2; page 4, paragraph 38) for disconnecting the first battery terminal from the battery charging device.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peplinski.

Peplinski discloses the battery backup apparatus of claim 10, as discussed above, and further discloses one or more visual signaling devices (page 3, paragraphs 32-33). Peplinski discloses that the battery backup apparatus can connect to the Internet and transmit fax messages to inform the user of system conditions.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peplinski, in view of Furst (US 5,844,328).

With respect to claim 9, Peplinski discloses the battery back up apparatus of claim 1. Peplinski does not expressly disclose circuitry for selectively disconnecting the first battery terminal from the first backup port when the first backup port is disconnected from the input DC voltage.

Furst discloses a backup battery apparatus comprising a switch 72 that allows the backup battery 12 to be disconnected from the load 20 at any time desired by the user (figure 1, items 72; column 6, lines 53-64).

Peplinski and Furst are analogous because they are from the same field of endeavor, namely battery backup apparatuses that recharge during normal operation and discharge the voltage to a load when the main power source fails.

At the time of the invention by applicant, it would have been obvious to combine the battery backup apparatus disclosed in Peplinski with the cutout switch disclosed in Furst. The motivation for doing so would have been to disconnect the battery to prevent any current discharge when the battery backup apparatus is not connected to a power source.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adi Amrany whose telephone number is (571) 272-0415. The examiner can normally be reached on weekdays, from 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571) 272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2836

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AA


BURTON S. MULLINS
PRIMARY EXAMINER

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